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EXECUTIVE COMMITTEE OF  
THE MULTILATERAL FUND FOR THE  
IMPLEMENTATION OF THE MONTREAL PROTOCOL  
Seventieth Meeting  
Bangkok, 1-5 July 2013

**PROJECT PROPOSAL: HONDURAS**

This document consists of the comments and recommendation of the Fund Secretariat on the following project proposal:

Phase-out

- HCFC phase-out management plan (stage I, second tranche)

UNIDO/UNEP

## PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

### Honduras

(I) PROJECT TITLE	AGENCY
HPMP (stage I)	UNIDO (lead), UNEP

(II) LATEST ARTICLE 7 DATA	Year: 2011	22.56 (ODP tonnes)
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)							Year: 2012			
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab Use	Total sector consumption	
				Manufacturing	Servicing					
HCFC123										
HCFC124										
HCFC141b					3.13				3.13	
HCFC-141b in Imported Preblended Polyol		3.54							3.54	
HCFC142b										
HCFC22					21.00				21.00	

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:	19.9	Starting point for sustained aggregate reductions:	20.70
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	6.97	Remaining:	13.73

(V) BUSINESS PLAN		2013	2014	2015	2016	2017	2018	2019	2020	Total
UNIDO	ODS phase-out (ODP tonnes)	1.00	0.0	0.0	1.00	0.0	0.66	0.0	0.49	3.15
	Funding (US \$)	96,750	0	0	96,750	0	64,500	0	43,000	301,000
UNEP	ODS phase-out (ODP tonnes)	0.55	0.0	0.0	0.55	0.0	0.28	0.0	0.28	1.66
	Funding (US \$)	56,500	0	0	56,500	0	56,500	0	28,250	197,750

(VI) PROJECT DATA			2010	2011	2013	2014	2015	2016	2017	2018	2019	2020	Total
Montreal Protocol consumption limits			n/a	n/a	19.90	19.90	17.91	17.91	17.91	17.91	17.91	12.94	n/a
Maximum allowable consumption (ODP tonnes)			n/a	n/a	19.90	19.90	17.91	17.91	17.91	17.91	17.91	12.94	n/a
Agreed Funding (US\$)	UNIDO	Project costs	100,000	0	90,000	0	0	90,000	0	60,000	0	40,000	380,000
		Support costs	7,500	0	6,750	0	0	6,750	0	4,500	0	3,000	28,500
	UNEP	Project costs	75,000	0	50,000	0	0	50,000	0	50,000	0	25,000	250,000
		Support costs	9,750	0	6,500	0	0	6,500	0	6,500	0	3,250	32,500
Funds approved by ExCom (US\$)	Project Costs	175,000	0	0	0	0	0	0	0	0	0	0	175,000
	Support Costs	17,250	0	0	0	0	0	0	0	0	0	0	17,250
Total funds requested for approval at this meeting (US\$)	Project Costs	0	0	140,000	0	0	0	0	0	0	0	0	140,000
	Support Costs	0	0	13,250	0	0	0	0	0	0	0	0	13,250

Secretariat's recommendation:	For blanket approval
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## **PROJECT DESCRIPTION**

1. On behalf of the Government of Honduras UNIDO, as the lead implementing agency, has submitted to the 70<sup>th</sup> meeting of the Executive Committee a request for funding for the second tranche of stage I of the HCFC phase-out management plan (HPMP) at a total cost of US \$153,250, consisting of US \$90,000, plus agency support costs of US \$6,750 for UNIDO, and US \$50,000, plus agency support costs of US \$6,500 for UNEP. The submission includes a progress report on the implementation of the first tranche of the HPMP, and annual implementation plans for 2013 to 2016.

### Background

2. The HPMP for Honduras was approved by the Executive Committee at its 63<sup>rd</sup> meeting to reduce HCFC consumption by 35 per cent of the baseline by 2020, at a total funding level in principle of US \$691,000 (i.e., US \$380,000, plus agency support costs of US \$28,500 for UNIDO, and US \$250,000, plus agency support costs of US \$32,500 for UNEP). Also at the 63<sup>rd</sup> meeting, the Executive Committee approved the first tranche of stage I of the HPMP, at the amount of US \$192,250 (i.e., US \$100,000, plus agency support costs of US \$7,500 for UNIDO, and US \$75,000, plus agency support costs of US \$9,750 for UNEP).

### Progress report on the implementation of the first tranche of the HPMP

3. Following the approval of the HPMP, the Executive Order 06/2012 that improved the legal framework for the complete phase-out of ODS, was completed and approved by the President of Honduras and the Ministry of Natural Resources and the Environment. The amended legislation *inter alia* establishes the HCFC quota system which became operational from May 2013, requires a mandatory report on the import and sale of ODS, and on certification of refrigeration service technicians. It also requires licenses to be issued by the Ozone Unit for imports of second-hand and new refrigeration and air-conditioning equipment; and includes staged restrictions on imports of new equipment based on their energy efficiency. A ban on the import of HCFC-141b containers, and a ban on the import of HCFC-141b used for flushing refrigeration systems will be issued once technical options are available in Honduras.

4. Meetings were held with the Customs Directorate to coordinate training sessions on the new legal framework. Customs training programmes had been revised to include an HCFC quota system; two officials from the Ozone Unit attended the Central America workshop for National Ozone Units and Customs authorities organized by UNEP. The recovery and recycling network established through the terminal phase-out management plan (TPMP) is operational and chemical analyses of recovered refrigerants have been undertaken. Guidelines for the use of hydrocarbon as alternative refrigerants have been developed and issued through a technical manual for the refrigeration service sector. The training programme using alternative cleaning agents instead of HCFC-141b will be conducted in June 2013. In addition, some HCFC-based commercial refrigeration equipment confiscated by the authorities was converted to R-290 and donated to different training institutions and schools; and over 30 air-conditioning systems have been retrofitted to R-290 and the HCFC-22 contained in the systems has been recovered. The project management and monitoring unit has become operational.

5. As of April 2013, of the US \$175,000 in funds approved for the first tranche, US \$89,121 had been disbursed or committed. The balance of US \$85,879 will be disbursed in 2013.

### Annual plans for the second tranche of the HPMP

6. The main activities to be implemented during the second tranche of stage I of the HPMP include:
- (a) Review of import to include refrigerant mixtures, inclusion of the revised HCFC codes in

the licensing system; dissemination of the legislative reforms for HCFCs, restrictions on imports of HCFC-based systems; and development of regulations for the proper handling of ODS during service practices including, installation and use of high energy efficiency refrigeration systems (UNEP, US \$26,000);

- (b) Training of 100 customs enforcement officers in the control of imports of HCFCs and HCFC-based equipment; development of an online module for training on ODS control; design of a register system for importers, end-users and other stakeholders; awareness activities favouring consumption of non-HCFC-based equipment; development of standards for Government's purchases of refrigeration and air-conditioning equipment (UNEP, US \$24,000);
- (c) Technical assistance for end-users in the refrigeration and air-conditioning sector, including training of 100 technicians on alternative methodologies to HCFC-141b used for flushing refrigeration circuits; design and start the implementation of an incentive programme for end-users including the establishment of a centre to train local technicians and demonstrate retrofit of HCFC-based equipment; distribution of 50 tool kits to technicians who have been certified in good service practices on the safe handling of flammables, and technical update of the recovery and recycling centres established during CFC phase-out (UNIDO, US \$65,000), and
- (d) Implementation, monitoring and control activities, ensuring the successful implementation of the HPMP, and enabling the country's compliance with its obligations under the Montreal Protocol (UNIDO, US \$25,000).

7. With the funding remaining from the TPMP (US \$71,000), UNEP will implement the following activities supporting those being implemented under the HPMP: coordination meetings with customs officers and information sessions with customs agents from the private sector; and issuance of HCFC import permits on-line. Continue implementing the certification of technicians in good practices with emphasis on those that have not received any formal training; and continue monitoring the recovery and recycling network and equipment that has previously been retrofitted to non-ODS refrigerants to assess its performance and safety operation. These activities will be completed by the end of 2013.

## **SECRETARIAT'S COMMENTS AND RECOMMENDATION**

### **COMMENTS**

#### Operational license system

8. In line with decision 63/17 and as required under the Agreement between the Government of Honduras and the Executive Committee, UNEP has confirmed that the Government has established an enforceable national system of licensing and quotas for HCFC imports and exports and that the system is capable of ensuring compliance with the Montreal Protocol HCFC phase-out schedule for the duration of the Agreement. Importers must request a mandatory permit from the Ministry of Natural Resources and the Environment based on the established quota. The Customs authorities require the permit to be delivered to the importer by the Ministry in order to authorize the importation. The HCFC quotas up to 2015 are presented in Table 1.

**Table 1. HCFC import quotas in Honduras**

Year	HCFC consumption (metric tonnes)*	
	Allowed under the Montreal Protocol	Quotas assigned**
2013	344.70	275.76
2014	327.47	261.97
2015	310.23	248.18

(\*) Includes HCFC-22 and HCFC-141b.

(\*\*) 20 per cent is reserved for exceptional cases or to other importers such as end-users.

### HCFC consumption

9. The HCFC baseline for compliance has been established at 19.9 ODP tonnes, based on the actual consumption reported under Article 7 of the Montreal Protocol for 2009 and 2010. The established baseline is equal to that in the Agreement between the Government of Honduras and the Executive Committee; therefore, no adjustments to the Agreement are required. Based on preliminary figures, the consumption in 2012 has been estimated at 24.11 ODP tonnes (Table 2). An additional 3.54 ODP tonnes of HCFC-141b was imported in pre-blended polyol systems; which will be phased out during implementation of stage II of the HPMP.

**Table.2 HCFC consumption in the Honduras (2006-2011 Article 7, 2012 estimated)**

HCFC	2006	2007	2008	2009	2010	2011	2012*	Baseline
<b>Metric tonnes</b>								
HCFC-22	196.9	252.7	295.6	290.5	364.3	372.00	381.48	327.4
HCFC-141b	12.7	30.2	39.2	16.7	17.8	19.10	28.45	17.3
Total (mt)	209.6	282.9	334.8	307.2	382.1	391.10	409.93	344.7
<b>ODP tonnes</b>								
HCFC-22	10.8	13.9	16.3	16.0	20.0	20.46	20.98	18.0
HCFC-141b	1.4	3.3	4.3	1.8	2.0	2.10	3.13	1.9
Total (ODP tonnes)	12.2	17.2	20.6	17.8	22.0	22.56	24.11	19.9

(\*) Estimated.

### Technical issues discussed

10. UNEP reported that following the approval of the HPMP, the Government of Honduras amended the ODS regulation that would allow for a better control and management of the phase-out of HCFCs. During that period, the outstanding investment activities of the TPMP (such as converting CFC-12-based domestic refrigerators to hydrocarbon-based refrigerants, and technical assistance to phase-out CFC-12 in two public hospitals) were completed. However, activities with related additional training of customs officers and technicians, and a few public awareness activities, were not yet finalized. As the new ODS framework regulation is already in force, the outstanding activities under the TMPM will be completed by the end of 2013.

11. With regard to reported activities on the introduction of hydrocarbon as an alternative refrigerant in commercial refrigeration equipment and air-conditioner systems, the Secretariat requested additional information on the current use of hydrocarbon-based refrigerants in the country, including the extent of retrofitting HCFC-22 based equipment to R-290, the regulations in place and constraints in allowing the use of hydrocarbon-based refrigeration and air-conditioning systems. UNEP, as the lead agency of the HPMP, explained that the use of hydrocarbon was not considered as a viable alternative during the implementation of the TPMP. The Government of Honduras took the initiative, in cooperation with UNIDO, and implemented simple training programmes for service technicians, trials, and conversion of domestic refrigerators to R-600a, which are currently operating in the country. However, refrigerant-grade hydrocarbons or R-290-based air-conditioning systems are not available in the local market. The Government is not proposing to retrofit HCFC-22-based refrigeration and air-conditioning

systems to hydrocarbon refrigerants, but to create awareness among technicians and end-users on alternative technologies, train the technicians properly, and, most importantly, support the legislation to promote the use of equipment designed with hydrocarbon refrigerants.

12. UNEP also reported that among the constraints for the introduction of flammable refrigerants in the country included the fear of explosions; lack of knowledge on the technologies; lack of training of refrigeration technicians; and the unavailability of refrigerants. These constraints could be addressed through pilot projects, training of trainers and some refrigeration technicians on the proper use of alternative flammable technologies, and relevant modifications to the legislation to promote the use of hydrocarbon refrigerants.

13. The Secretariat notes that the Government has strengthened the regulatory framework for an effective control of HCFCs, import licensing and quota systems are operational and will enable consumption reductions in line with the Montreal Protocol's phase-out schedule. The activities in the servicing sector have been developed with the participation of key stakeholders. The ODS legislation as amended by the Government, requires *inter alia* the mandatory certification of all refrigeration and air-conditioning technicians, the obligation of hiring only certified technicians and prohibits selling refrigerants to uncertified technicians. Furthermore, imports of refrigeration and air-conditioning equipment are managed through an energy efficiency assessment conducted by the National Committee of Energy on a case-by-case basis. The activities to be implemented with resources available from the TPMP will be complementary to those under the HPMP resulting in a reinforced recovery and recycling network and a more robust certification programme for service technicians.

## RECOMMENDATION

14. The Fund Secretariat recommends that the Executive Committee takes notes of the progress report on the implementation of the first tranche of stage I of the HCFC phase-out management plan (HPMP) in Honduras, and further recommends blanket approval of the second tranche of stage I of the HPMP for Honduras, and the corresponding tranche implementation plans, with associated support costs at the funding level shown in the table below, on the understanding that funding of the third tranche of stage I of the HPMP could be submitted after the project completion report of the terminal phase-out management plan for Honduras had been submitted to the Executive Committee:

	<b>Project Title</b>	<b>Project funding (US \$)</b>	<b>Support cost (US \$)</b>	<b>Implementing agency</b>
(a)	HCFC phase-out management plan (stage I second tranche)	90,000	6,750	UNIDO
(b)	HCFC phase-out management plan (stage I second tranche)	50,000	6,500	UNEP

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